

REMARKS:

In response to the Office Action mailed on October 6, 2004 Applicant wishes to enter the following remarks for the Examiner's consideration. Applicant has amended claims 1, 2, 3, 14, 19, 21 and 23. Claims 1-23 are pending in the application.

Drawing Objection

Applicant herewith submits formal replacement drawings of FIGs. 1-5 that correspond to informal drawings filed on October 31, 2001. FIG. 3 has been correctly labeled Prior Art.

Claim Objections

Claims 2 and 3 have been amended to remove errors in syntax. No new matter has been added.

Claim Rejections 35 USC §112

Claim 1 has been amended to address the lack of antecedent basis in the use of the term "the triggering macro". Specifically, "selecting " in claim 1 has been replaced with "triggering". This is consistent with the Applicant's specification (page 9, lines 1-3; page 9, lines 15-19), and Applicant asserts that this also removes the grounds for the antecedent basis rejection. No new matter has been added.

Claim 1 has been amended to address the lack of antecedent basis in the use of the phrase "said one or more macros". Specifically, "said one or more macros" has been replaced with "said one or more compiled macros". No new matter has been added.

Claim 14 has been amended to address the ambiguity in multiple uses of the phrases “one or more stimuli” and “one or more hardware states”. No new matter has been added.

Claim 14 has been amended to address the antecedent basis problem with the use of the phrase “the one or more macros “. The “the one or more macros” has been changed to “the one or more compiled macros”. No new matter has been added.

Claim 19 has been amended to address the antecedent basis rejection. Specifically, “one or more hardware states” has been replaced by “the one or more hardware states”. No new matter has been added.

Claim 21 has been amended to address the antecedent basis rejection. Specifically, “fixturing device” has been replaced by “the fixturing device”. No new matter has been added.

Claim 23 has been amended to improve the clarity. Specifically, “one or more macros” has been replaced by “one or more of the one or more compiled macros”. No new matter has been added.

In view of the above amendments, Applicant submits that the 35 USC 112, second paragraph rejections of claims 1-23 have been overcome. Reconsideration and allowance of claims 1-23 is hereby requested at the Examiner’s earliest convenience.

Claim Rejections 35 USC §101

Applicant has amended the first element of claim 14 to address the non-statutory rejection of claims 14-23. Specifically, claim 14 has been amended to include the recitation of a computer program product embodying the structure of the Applicant’s claim 14. No new matter has been added. Applicant would also like to note that all the elements of claim 14 should not be so limited so as to reside within a computer

program product or readable medium, since it may be possible that some elements of the fixturing device are not software related (the use of comprises in claim 14 is open-ended). However, as recited in claim 14 the fixturing device is coupled to the control software module of a computer program product.

In view of the above amendment, Applicant submits that the 35 USC 101, rejection of claims 14-23 have been overcome. Reconsideration and allowance of claims 14-23 are hereby requested at the Examiner's earliest convenience.

Claim Rejections 35 USC 102(b)

Claims 1-13 are rejected under 35 USC 102 (b) as being anticipated by Buckler, US Patent No. 5,050,088. This rejection is traversed as being improper because the Buckler reference does not contain every element and limitation as contained in and arranged as recited in the claims. Contrary to the Examiner's statement that all elements are disclosed in the Buckler reference, many of the elements are not, as discussed below; the rejection is thus unsupported by the art and should be withdrawn. The Examiner is respectfully directed to MPEP §2131 which provides:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 *Fed. Cir. 1989). The elements must be arranged as required by the claim.

Claim 1

As a response to the Examiner's assertion of a correspondence existing between elements of claim 1 and elements of the Buckler reference, Applicant would like to note that:

1. Examiner has stated a correspondence between various elements of claim 1 and what is taught by Buckler, but Examiner has not shown where

Buckler teaches "A method for facilitating modification of a hardware state of a fixture system". Buckler does not teach the use of a fixturing system, and so certainly does not teach modification of a hardware state of a fixture system. Buckler teaches a production control system and an associated method for interfacing automated material handling systems to manufacturing work cells (abstract), but there is no mention of a fixturing device or a fixturing system. And, significantly, the Examiner has not noted with particularity where such teaching of a fixturing device occurs in the Buckler reference.

2. Examiner has stated that Buckler teaches the use of a high-level programming language to create one or more compiled macros, but Applicant asserts that this aspect of the Applicant's claim 1 is not taught, disclosed or otherwise anticipated by Buckler. The Examiner has referenced the abstract of Buckler, but the abstract of Buckler has no mention, suggestion or anticipation of the use of a high level programming language. And, significantly, the Examiner has not noted with particularity where such teaching occurs in the Buckler reference.
3. Examiner has stated that Buckler teaches "compiling one or more macros into a format recognizable by an interpreter residing within a fixturing device", but Applicant asserts that this aspect of the Applicant's claim 1 is not taught, disclosed or otherwise anticipated by Buckler. The Examiner has referenced col. 2 lines 15-22 of Buckler, but this actually teaches away from the Applicant's claim 1 since the use of a high level script implies that a high level programming language such as C++ is not used. Applicant further notes that Buckler has no mention, suggestion or anticipation of a fixturing device and so there certainly is no mention of an interpreter residing in a fixturing device. And, significantly, the Examiner has not noted with particularity where such teaching occurs in the Buckler reference.
4. Examiner has stated that Buckler teaches "transferring the one or more compiled macros to a firmware residing within the fixturing device and the firmware running the triggered macro and executing one or more

commands contained therein in response thereto”, but Applicant asserts that this aspect of the Applicant's claim 1 is not taught, disclosed or otherwise anticipated by Buckler. The Examiner has referenced col. 2 lines 15-22 of Buckler, but this teaching has no relation to Applicant's claim 1. Specifically, there is no mention, suggestion or anticipation of transferring compiled macros (or even macros) to a firmware residing within the fixturing device (or even any firmware). There is no teaching, suggestion, or anticipation of a fixturing device. Additionally, there is no teaching, mention, or suggestion of “the firmware running the triggered macro and executing one or more commands contained therein in response thereto”. And, significantly, the Examiner has not noted with particularity where such teaching occurs in the Buckler reference.

In light of the above arguments, Applicant respectfully notes that there are many differences between the recitations of Applicant's claim 1 and what is taught by Buckler. Applicant respectfully requests reconsideration and allowance of claim 1 and its dependent claims at the Examiners earliest convenience.

Referring to claim 2-13, Applicant notes that claims 2-13 depend from claim 1 which has been shown to be patentable. Reconsideration and allowance of claim 2 is therefore respectfully requested at the Examiner's earliest convenience. Although additional arguments could be made for the patentability of each of these claims, such arguments are believed unnecessary in view of the above discussion of claim 1. The undersigned wishes to make it clear that not making such arguments at this time should not be construed as a concession or admission to any statement in the Office Action.

Claim Rejections 35 USC §103 (a)

Claims 14-23 are rejected under 35 USC 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Buckler. Applicant traverses this rejection of the claims. Applicant acknowledges that APAA fails to teach elements of claim 14. Applicant further notes that there is no basis in the art to combine Buckler and AAPA, since Buckler has no relation to the design of fixturing systems, devices and software. Applicant asserts that there is no teaching, motivation or suggestion to combine the Buckler reference and the AAPA. As taught by the Buckler abstract and col. 1, Buckler is directed to the operation of an entire plant which may contain many computer systems, robotic systems, human workers, and material handling systems. Thus, the scale of the teaching of Buckler and the fixturing system of the Applicant's invention are very different. One of average skill in the art of fixturing systems and devices would not be expected to be knowledgeable about the complexity of how to design a control system, software or otherwise, for an entire physical plant.

Furthermore, the combination of Buckler and APAA teaches away from the Applicant's claim 1 since Buckler teaches the use of a script to provide a system that is configurable (see abstract and col. 2 lines 15-22). However, the script of Buckler (see Col. 10, lines 10-20 and Col. 14, lines 21-30) are command oriented and not related to high level programming code that is compiled and interpreted. The combination of Buckler and AAPA teaches away from the use of a high level programming language since Buckler uses a command line interpreted language. This is further indicated by the lack of any teaching, suggestion or anticipation in Buckler of firmware, compiled macros, or high-level software development principles and practices.

Applicant respectfully submits that claims 15-23 depend from claims which have been shown to contain patentable subject matter, as discussed above, and thus respectfully declines to make amendments to claims 15-23 at this time. However, in the event that the rejection of the underlying base claims is maintained, Applicant herewith reserves the right to amend these claims.

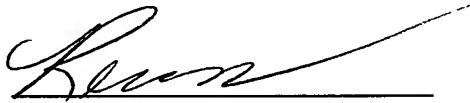
In light of the foregoing amendments and remarks, applicant submits that the 35

U.S.C. 112, second paragraph, rejection of claims 14-23 have been overcome. Reconsideration and allowance of claims 14-23 is therefore respectfully requested at the Examiner's earliest convenience. Although additional arguments could be made for the patentability of each of the claims, such arguments are believed unnecessary in view of the above discussion. The undersigned wishes to make it clear that not making such arguments at this time should not be construed as a concession or admission to any statement in the Office Action.

No amendment made herein was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim unless an argument has been made herein that such amendment has been made to distinguish over a particular reference or combination of references.

Please contact the undersigned if there are any questions regarding this response or application.

Respectfully submitted,



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